Section I. (Amendments to the Claims)

Please amend claims 19 and 20, as set out in the listing below of claims 1-56 of the application.

Claims 1-18 (Cancelled)

19. (Currently amended) A method of making a porous metal matrix, including the steps of:

providing fine metal particles comprising a ~~Group VIII or Group IB~~ metal selected from the group consisting of ruthenium, rhodium, palladium, osmium, iridium, gold and platinum; and

sintering said fine metal particles to form the porous metal matrix.

20. (Currently amended) A method of making a porous metal matrix, including the steps of: providing fine metal particles comprising a ~~Group VIII or Group IB~~ metal selected from the group consisting of ruthenium, rhodium, palladium, osmium, iridium, gold and platinum; and sintering said fine metal particles to form the porous metal matrix, wherein the fine metal particles have average particle size in a range of from about 20 nm to about 1.0 μm.

21. (Original) The method of claim 19, wherein the fine material particles have been sintered at temperature in a range of from about 20°C to about 1500°C.

22. (Original) A method of making a porous metal matrix, including the steps of: forming a solid-phase matrix comprising at least a Group VIII or Group IB metal and an oxidizable carbon-containing material; and heating said solid-phase matrix in presence of an oxidizing agent to gasify said oxidizable carbon-containing material.

23. (Original) The method of claim 22, wherein the oxidizable carbon-containing material is selected from the group consisting of elemental carbons and hydrocarbon compounds.

24. (Original) The method of claim 22, wherein the oxidizable carbon-containing material is dispersed in the solid-phase matrix.

25. (Original) The method of claim 22, wherein the oxidizing agent is selected from the group consisting of elemental oxygen, oxygen gas, ozone, air, and combinations of two or more species thereof.

26. (Original) A method of making a porous metal matrix, including the steps of: forming a solid-phase matrix comprising at least a Group VIII or Group IB metal and soluble metal oxide particles; and immersing said solid-phase matrix in an acidic solution to dissolve said soluble metal oxide particles.

27. (Original) The method of claim 26, wherein the soluble metal oxide particles comprise at least one metal component selected from the group consisting of Fe, Ni, Ag, and Pt.

Claims 28-50 (Cancelled)

51. (Original) A process for supplying a low vapor pressure fluid reagent, such process comprising: providing a storage and dispensing vessel containing a solid-phase metal adsorbent having a sorptive affinity for said low vapor pressure fluid reagent; sorptively adsorbing the low pressure fluid reagent on the solid-phase metal adsorbent at an interior gas pressure to yield a sorbate fluid-retaining metal adsorbent; desorbing sorbate fluid from the sorbate fluid-retaining metal adsorbent; and dispensing the desorbed fluid from said storage and dispensing vessel; wherein said solid-phase metal adsorbent medium includes a porous metal matrix comprising at least one Group VIII or Group IB metal.

52. (Original) A method of supplying a low vapor pressure fluid to a process requiring same, said method comprising sorptively retaining said low vapor pressure fluid on a solid-phase metal adsorbent including a porous metal matrix comprising at least one Group VIII or Group IB metal, and desorptively removing said low vapor pressure fluid from said metal adsorbent and transporting same to said process when said process requires same.

53. (Original) The method of claim 52, wherein said step of desorptively removing said low vapor pressure fluid from said adsorbent comprises a desorption modality selected from the group consisting of pressure differential-mediated desorption, thermally-mediated desorption, and concentration differential-mediated desorption.

Claims 54-55 (Cancelled)

56. (Original) A method of suppressing pressure perturbations of a fluid storage and dispensing system including a storage and dispensing vessel for holding a low vapor pressure liquefied gas therein, a discharge assembly disposed on the vessel for dispensing low vapor pressure liquefied gas therefrom, and a gas flow regulator inside the vessel arranged for flow therethrough of gas deriving

from the low vapor pressure liquefied gas, so that gas flows through the regulator prior to flow through the discharge assembly, wherein said pressure perturbations are occasioned by ingress of said low vapor pressure liquefied gas into the regulator, said method comprising shielding the regulator from contact with said low vapor pressure liquefied gas with a body of solid-phase metal sorbent arranged in the vessel to sorptively take up any low vapor pressure liquefied gas that would otherwise flow into the regulator, said solid-phase metal sorbent including a porous metal matrix comprising at least one Group VIII or IB metal.